5

10

15

ABSTRACT

An electromechanical valve assembly (46) for an internal combustion engine (36) is provided. The valve assembly (46) includes a rotor (68) centered about a first axis (122) having a bore (114) extending generally axially therethrough. The valve assembly (46) further includes a stator (66) operatively disposed about the rotor (68) for producing a torque to cause rotation of the rotor (68) about the axis (122). Finally, the valve assembly (46) includes a valve (70) having a valve stem (126) and a valve head (84). The valve stem (126) extends generally axially through the bore (114) of the rotor (68). The valve stem (126) is also configured to move generally axially responsive to the rotation of the rotor (68) to selectively engage and disengage the valve head (84) with a valve seat (124) of the engine (36).

274198\JFBU\65,161-022